1. Rejection of Claims 1-10, 13, 16, 26, 79-88, 91, 94, and 104 Under 35 U.S.C. §102(b)

Reconsideration is requested of the rejection of claims 1-10, 13, 16, 26, 79-88, 91, 94, and 104 under 35 U.S.C. §102(b) as being anticipated by Zhou et al. (U.S. 2002/0123538A1).

Claim 1 is directed to an article comprising an ultrasonically bonded laminated structure. The laminated structure comprises a first material, a second material, and an adhesive composition. The adhesive composition comprises an atactic polymer and an isotactic polymer. The atactic polymer has a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000. The isotactic polymer has a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000. The first material and the second material are dissimilar materials and are ultrasonically bonded together. As defined in paragraph 23 of the instant specification, the term "dissimilar" means that the materials have melting temperatures that vary by more than about 40°F, and have dissimilar molecular structures such that upon ultrasonic bonding, the materials are not brought together as one material and typically have macro-phase separation.

Zhou et al. ('538) disclose adhesive compositions comprising selected ratios of crystalline and amorphous polymers. Specifically, one adhesive composition of the invention comprises an atactic polymer having a degree of crystallinity of about 20% or less and a number-average molecular weight of from about 1,000 to about 300,000, and an

isotactic polymer having a degree of crystallinity of about 40% or more and a number-average molecular weight of from about 3,000 to about 200,000. One preferred adhesive composition blends a selected amount of isotactic polypropylene with a selected amount of atactic polypropylene.

The '538 reference also discloses methods of making laminated structures and disposable absorbent articles employing the adhesive composition. The laminated structures comprise a first layer and a second layer, wherein at least a portion of the first layer is attached to at least a portion of the second layer using an adhesive composition. The first layer, second layer, or both may comprise a variety of materials including a nonwoven, a film, a woven material, an elasticized component, or a substrate comprising cellulosic material, thermoplastic material, or both. Examples of materials or webs bonded together by the adhesive to form the laminated structures of '538 include necked-bonded laminates (NBL)[1], polypropylene, spunbonded layers, stretched-bonded laminates (SBL)[2], and an outer cover comprising a polyethylene layer and a polypropylene, spunbonded layer.[3] Additionally, the '538 reference discloses that the resulting laminated materials may be exposed to ultrasonic energy.

The '538 reference, however, fails to disclose a laminated structure comprising an adhesive, a first material and a second

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[1] As defined in '538, a necked-bonded laminate substrate (NBL) generally comprises a polyethylene layer sandwiched between two polypropylene, spunbonded layers. Paragraph 59.

[2] As defined in '538, a stretch-bonded laminate (SBL) generally comprises an elongated elastic web or elastomeric strands bonded between two spunbonded layers. Paragraph 130.

[3] The '538 reference at paragraph 59.

material, wherein the first and second materials are dissimilar materials that are ultrasonically bonded together. As noted above, "dissimilar" means that the materials have melting temperatures that vary by more than about 40°F and have dissimilar molecular structures. These are requirements of claim 1 and are significant aspects of Applicants' invention.

In the Response to Arguments section of the final Office action dated April 5, 2006, the Office asserts that Applicants' argument that '538 fails to disclose a laminated structure comprising an adhesive, a first material and a second material, wherein the first and second material are dissimilar materials is not persuasive as '538 teaches a composition that may be utilized to bond two materials together wherein the two materials may be the same or different than each other.[4] While the reference does disclose that the materials comprising the laminate may be "different," Applicants respectfully assert that '538 does not teach a first and second material being dissimilar materials; that is, having melting temperatures that vary by more than about 40°F, and having dissimilar molecular structures such that upon ultrasonic bonding, the materials are not brought together as one material and typically have macro-phase separation. As such, the "different" materials term as disclosed by '538 is not, and cannot be, equivalent to "dissimilar materials" as required by claim 1.

Specifically, as disclosed in the instant specification, examples of dissimilar materials that can be ultrasonically bonded together utilizing the adhesive composition of claim 1

[4] *See* page 4 of the final Office action.

include: (1) neck-bonded laminates to pattern unbonded materials and (2) spunbond meltblown to woven polyester knit.[5] A close review of the working Examples of the '538 reference, however, shows that the laminated structures made using the adhesive composition of '538 are produced using a first and second material that are similar or compatible. Specifically, the only examples of laminated structures in the '538 reference are made by bonding a polypropylene layer to a polypropylene layer.[6] For example, Example 2 uses laminates comprising a NBL bonded to a NBL. As such, the two outside polypropylene, spunbonded layers of the NBLs are adhered together using the composition of '538. Similarly, Example 3 uses laminates comprising two polypropylene, spunbonded substrates together and Example 6 uses laminates comprising a NBL bonded to a SBL. Examples 4-5 use laminates comprising a NBL bonded to an outer cover material comprising a polyethylene layer and a polypropylene, spunbonded layer. As noted in '538, in both Examples 4 and 5, the polypropylene, spunbonded layer of the outer cover material is contacted with the adhesive composition and bonded to the NBL. As such, all of the working examples support a laminated substrate being made by bonding similar first and second materials with the adhesive composition of '538. Additionally, and importantly, none of the working Examples in '538 utilize ultrasonic bonding with any of the laminates.

In the Response to Arguments section of the instant final Office action, the Office asserts that it is improper for Applicants to limit their argument to preferred embodiments and

[5] Instant specification at page 11, paragraph 24.
[6] '538 at paragraph 59 and Examples 2-6.

examples of the '538. Applicants assert that the Federal Circuit has stated that "even if the claimed invention is disclosed in a printed publication, that disclosure will not suffice as prior art if it was not enabling." *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985), citing *In re Borst*, 345 F.2d 851, 855, 145 USPQ 554, 557 (CCPA 1965).[7] While it is true that anticipation does not require the teaching in the prior reference to be in the exact words of the claimed subject matter, it does require sufficient enabling disclosure with respect to the entirety of the claimed invention; that is, in this present case there must be an enabling disclosure of how to ultrasonically bond dissimilar materials as required in Applicants' claim 1. This is lacking in the '538 reference, as '538 provides no disclosure, in the working Examples or otherwise, as to how to ultrasonically bond such materials.

Furthermore, in the Office action dated October 10, 2006, and, again in the instant final Office action, the Office states that the adhesive of '538 may be utilized to laminate absorbent articles such as those incorporated by reference in paragraph 0072. Specifically, the Office cites to U.S. 5,176,668 ('668) and U.S. 5,904,672 ('672), which are incorporated by reference, for providing composite materials, laminates, and disposable absorbent articles with which adhesives of the '538 reference may be utilized. Applicants respectfully assert that, while references such as '668 and '672 disclose articles comprising a

[7] *See also* MPEP §2121.01, which states "[t]he disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation."

polypropylene liner and a polyethylene outer film, no where in the '668 or '672 references or in any of the other references incorporated into '538 is it disclosed or suggested to ultrasonically bond a first material and a second material that are dissimilar materials as required in claim 1.

Specifically, the Office cites to col. 7, lines 24+ (Example 1) in the '668 reference as showing an absorbent article comprising a polypropylene liner and a polyethylene outer film. The relevant section of this passage reads:

> "The diaper construction was completed by sandwiching the absorbent composite between a porous spunbonded polypropylene liner (23 g/yd^2) and a polyethylene film outer cover, sealed together with adhesive at the diaper perimeter."

Significantly, no where in the '668 reference is it disclosed or suggested that the porous spunbonded polypropylene liner and the polyethylene film outer cover are ultrasonically bonded together.

The Office additionally cites to '672 at col. 6, lines 9-47 and Examples for showing bonding of polypropylene to polyethylene. In col. 6, lines 9-47, the '672 reference discloses that the moisture barrier and bodyside liner may be bonded together using ultrasonic bonds, thermal bonds, adhesives, or other suitable means. Additionally, in the Examples, the moisture barrier is comprised of a polyethylene film and the bodyside liner is comprised of a nonwoven, spunbond polypropylene that are bonded together using a construction

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(citing *Elan Pharm., Inc. v. Mayo Found. For Med. Edu. & Research*, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 9 (Fed. Cir. 2003)).

adhesive. No where in the Examples or elsewhere in the '672 reference, however, is it taught or suggested to ultrasonically bond a polypropylene layer and a polyethylene layer together.

Similar to the '668 and '672 references, the other references incorporated into the '538 reference only disclose adhering a polypropylene layer to a polyethylene layer.[8] No where in the art is it suggested or disclosed to ultrasonically bond dissimilar materials such as a polypropylene layer to a polyethylene layer.

In the Response to Arguments section of the instant final Office action, the Office asserts that Applicants' argument that neither '668 nor '672, nor any other references incorporated into the '538 reference, disclose ultrasonically bonding dissimilar materials is not persuasive as these references were not relied upon for such a teaching. Specifically, the Office asserts that '538 teaches that the adhesive composition taught therein may be used to ultrasonically bond different materials, such as those taught in '668 and '672. Applicants' respectfully disagree that '538 makes such a teaching.

Specifically, a close reading of paragraph 72 in the '538 reference discloses that the **adhesive** of the '538 reference may be utilized with the composite materials and laminates of references such as '668 and '672, however, no where it is disclosed that these composite materials and laminates can be ultrasonically bonded together. Moreover, the only disclosure

[8] *See generally*, U.S. 4,798,603 at Examples 1 and 2; U.S. 5,176,672 at col. 6, lines 53-59 and col. 7, lines 23-32; U.S. 5,192,606 at Examples 2 and 5; U.S. 4,940,464 at col.5, lines 1-6 and lines 65-68 and col. 6, lines 1-3; U.S. 5,904,675 at Example 4; and U.S. 5,902,297 at col. 5, lines 50-67 and col. 6, lines 18-32.

of ultrasonic treatment in '538 is in paragraph 67, which makes no mention of the composites and laminates of the '668 and '672 references. This section of the '538 reference is separate from the section of the reference discussing the use of the adhesive composition of '538 in composites and laminates of '668 and '672. With all due respect, Applicants' assert that the Office is combining separate and distinct passages in the cited reference that cannot, and should not, be so combined; that is, the Office cannot pick and choose passages from a reference so as to find each and every limitation in Applicant's claim.

As stated in M.P.E.P. §2131, a claim is anticipated only if each and every element of the claim is described in the prior art reference. As stated above, the '538 reference fails to set forth a sufficient enabling disclosure of ultrasonically bonding a first material and a second material that are dissimilar materials as required by claim 1. As such, the '538 reference fails to teach each and every limitation of instant claim 1. As such, claim 1 is novel and patentable over the cited reference.

Claims 2-10, 13, 16, and 26 depend directly from claim 1. As such, claims 2-10, 13, 16, and 26 are patentable for the same reasons as claim 1 set forth above, as well as for the additional elements they require.

Claim 79 is similar to claim 1 and further requires the adhesive composition to have an open time of less than about 10 minutes. As the '538 reference fails to disclose a first material and a second material that are dissimilar materials and are ultrasonically bonded together, the '538 reference fails to teach each and every limitation of instant claim 79. As such, claim 79 is novel and patentable over the cited reference.

Claims 80-88, 91, 94, and 104 depend directly from claim 79. As such, claims 80-88, 91, 94, and 104 are patentable for the same reasons as claim 79 set forth above, as well as for the additional elements they require.

In view of the above, Applicants respectfully request favorable reconsideration and allowance of all pending claims. The Commissioner is hereby authorized to charge any fee deficiency in connection with this Letter To Patent And Trademark Office to Deposit Account Number 19-1345 in the name of Senniger Powers.

Respectfully Submitted,

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Via EFS